ESO 1982

1993 AGRICULTURAL OUTLOOK

GRAINS AND OILSEEDS

A Discussion Guide for County Agents

Prepared by
Allan E. Lines
Extension Economist
Department of Agricultural Economics and Rural Sociology
The Ohio State University

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SLIDE 1: WORLD GRAIN AND OILSEED: PRODUCTION AND USE

A. Markets for U.S. grains and oilseeds are global

1. In the last 10 years, exports have accounted for:

a. 54% of all wheat utilization

b. 36% of all soybean disappearance

c. 24% of all corn use

d. 4 of every 10 acres harvested

e. 40 cents of every dollar of farm income earned from grains and oilseeds came from export sales

B. Over time, annual worldwide production and use are closely matched

C. Production exceeded use 7 of the last 10 years

1. Stocks accumulate

2. Prices depreciate

a. prices in 1986/87 averaged 37% **below** 1988/89, a period when supply equaled demand

b. prices in 1992/93 will likely average 20% **below** 1988/89

D. Use exceeded production in '87 and '88

1. Production declines reflect:

a. acreage reduction

1) domestic farm programs
2) foreign acreage

b. drought-reduced yields

2. Global stocks were drawn down

a. "seller demand" for inventories, bid up market prices

E. Production exceeded use in '89 and '90

1. stocks increased

2. prices deteriorated

F. Production expected to equal use in 1992/93

1. Growing population assures increased use so long as supply is available

2. Improved diets (more meat) in developing economies

3. Year-to-year declines only four in last 30 years; drought-related

G. Comparing trends in U.S. production with the rest of the world:

1. The U.S. has accounted for virtually all of the decline in production

2. Since 1979:

a. non-U.S. production has trended **upward**

--80% in 1982-84
--81% in 1990-92
--until the last 2 years all of increased production came outside U.S.

b. U.S. production has been steady

--20% in 1982-84
--19% in 1990-92

3. This increasing global competitiveness helps explain the U.S. stake in bringing about international harmonization of farm policies.

a. reduction in production subsidies in other countries

b. spreading the production adjustment process to other countries

SLIDE 2: WORLD SOYBEAN PRODUCTION

A. Global production continues to grow

1. Increased South American production

2. Steady to lower U.S. production

B. U.S. losing preeminent position

1. 69% in 1964-66

2. 57% in 1982-84

3. 51% in 1990-92

SLIDE 3: WORLD WHEAT PRODUCTION

A. Global production continues to grow

1. Minor reduction in '91

--15% set-aside in U.S.
--low U.S. yield

2. Steady in '92

B. U.S. losing world share

1. 14% in 1982-84

2. 11% in 1992

SLIDE 4: WORLD CORN PRODUCTION

A. Global production continues to grow

1. Slow but steady growth

2. Year-to-year variation in the U.S.

a. drought - '83

b. drought and set-aside - '88

c. drought - '91

d. excellent weather - '92

B. U.S. losing share

1. 44% in 1984-86

2. 41% in 1990-92

SLIDE 5: CORN: SUPPLY AND USE (October Report)

			projected	
	1991/92	% change	1992/93	% change
planted acreage (mil)	76.0	+2	79.3	+4
harvested ac. (mil)	68.8	+3	72.2	+5
yield (bu/ac)	108.6	-8	123.8	+14
production (mil bu)	7,474	-6	8,938	+20
carry-in (mil bu)	1,521	+13	1,100	-28
total supply (mil bu)	9,016	-3	10,049	+11
feed use (mil bu)	4,880	+5	5,150	+3
total domestic use (mil bu)	6,325	+5	6,635	+5
exports (mil bu)	1,590	-8	1,550	-3
total use (mil bu)	7,915	+2	8,185	+3
carry-out (mil bu)	1,100	-28	1,864	+69

A. 1991/92 comments:

1. Production was down 6% because of lower yield

   --average yields were 12 bu. below trend line

2. Total supplies were down only 3% because of the higher carry-in

3. Exports were down 8%

   --due mostly to USSR: Soviet instability added to lack of demand

4. Downward adjustment in use was tempered by increased domestic feeding

   a. feeding increased about 211 mil. bu., setting a record 4.88 bil. bu.

   b. exports decreased about 135 mil. bu., to a level near the lows for more than a decade

5. Carry-out stocks decreased 28% to about 14% of annual use, the lowest since 1983-84 drought year

B. 1992/93 comments:

1. Total supplies are larger than last year

   --sharp increase (+20%) in production more than offset sharp decrease (-28%) in carry-in

2. Marginal increase in feed use is expected

   a. feeding margins have generally been at or above break-even

   b. beef, swine, and poultry numbers increasing

3. Feed use is likely to establish a new record, 5.2 billion bushels

4. Export prospects are most uncertain at this point

   a. USSR largely absent from market

   b. negative:

      --economic and political chaos
      --inadequate funds for purchase

   c. positive:

      --probable granting of additional "ag credits" to the USSR
      --efforts by the Soviets to maintain livestock production

d. export shipments have started 1992/93 at a slow pace

--exceeding a year earlier by only 2% through first couple of months of the marketing year; worse than last year's fast start (up 32%)
--never recovered last year
--sustained increase doubtful this year; expect -3% decline unless Soviet buying begins in big way
--China continues to export corn (8 million metric tons), cutting into our corn exports

5. Carry-out next August 31 is expected to be up 69% from a year earlier

a. estimated at around 23% of annual use; a more normal level

b. market is not tight; carryout could grow

SLIDE 6: CORN: STOCKS-PRICE RELATIONSHIP

A. Graph shows the historic relationship between year-end carry-out stocks and the season average price as a percent of the price support loan rate

B. 1991/92 Ohio price averaged $2.45

1. This was 153% of the national average loan rate of $1.62

2. Well above comparable historic levels because:

--prices had to be high enough to ensure an adequate supply from storage until the 1992 crop was made
--loan rate was the next to lowest in 15 years

C. For 1992/93:

1. With carry-out stocks projected to be in the 1.8 bil. bu. range, the season average price looks to be in the range of 110-130% of loan

2. With the loan rate = $1.72, this projects to an average price in the $1.90-2.30 range

SLIDE 7: CORN: OHIO AVERAGE FARM PRICES

A. This shows seasonal pricing patterns

B. Prices increased with the spring and summer weather scare in '90

1. Evidence of market tightness

2. Prices retreated once weather scare passed

C. '90/'91 prices demonstrate a normal return to storage coupled with a drought scare that broke in late summer

D. '91/'92 price peaked in March and held fairly steady until summer rains then prices began a 2 month rapid decline

E. Projections for 1992/93 are based on what is a historic seasonal pattern in years of large crops that follow normal crops

1. Actual 1992/93 Ohio average prices:

   September = $2.15, lower than a year earlier

   October = $1.95, lower than a year earlier

2. Prices should reach seasonal highs in early summer, at levels roughly 50-60 cents above expected harvest lows in the $1.90 neighborhood

3. Add to that a likely weather scare in May-July, and prices could rebound to the $2.60 mark.

SLIDE 8: 1993 CORN PROGRAM

A. This graph charts the returns above variable costs for a fairly typical Ohio corn grower participating in the 1993 ARP-Flex program, compared with returns without participation

B. The "break-even" price is about $2.55

   --this compares to a preliminary expectation for an average 1992/93 price centering around $2.20

C. The flex acres are planted to corn for calculation purposes. Some acres will go to beans; the market, however, will likely equalize returns from corn and beans.

D. The increased ARP (10%) will likely decrease participation in next year's corn program to the 75% range

SLIDE 9: SOYBEANS: SUPPLY AND USE

			projected	
	1991/92	% change	1992/93	% change
planted acreage (mil)	59.1	+2	59.1	0
harvested ac. (mil)	58.0	+3	58.1	0
yield (bu/ac)	34.2	0	36.3	+6
production (mil bu)	1,986	+3	2,108	+6
carry-in (mil bu)	329	+38	278	-16
total supply (mil bu)	2,318	+7	2,388	+3
domestic crush (mil bu)	1,254	+6	1,265	+1
total domestic use (mil bu)	1,355	+6	1,363	+1
exports (mil bu)	685	+23	720	+5
total use (mil bu)	2,040	+11	2,083	+2
carry-out (mil bu)	278	-16	305	+10

A. 1991/92 comments:

1. Total supply increased, up 7%

   a. crop was normal, yields unchanged, acreage up 3%

      --U.S. accounted for only about 51% of world production, down from 60-65% in late 1970s/early 1980s, and 75% of 30 years ago

   b. carry-in was up 38% from the year earlier and down 39% from its '86 level

2. Use increased 11%

   a. largely from higher exports

   b. exports increased 23%

      --most of increases were in Countries other than EC or Japan

3. Domestic crush up 6%

   a. soymeal exports up 22%; soyoil exports up 99%

   b. domestic feeding rates increased 1%

4. Carry-out stocks decreased by 11%, to 14% of annual use

      --about equal to long-term average, 15%

B. 1992/93 comments:

1. Acreage -- no change

   --still down 12 million acres from '79 peak

2. Production up 6% because of slightly higher yield

   --yet, U.S. share of world increased slightly to 51%

   --South American production up 2%

3. Total supplies up 3%, due to higher production

   --increased use will not keep prices from declining
   --have regained use lost due to '88's short supply and high price

4. Domestic crush will set a new record, 1.27 million bushel

   a. soymeal feeding will increase 2%

   --slight expansion in all classes of livestock

   b. soymeal exports will be steady as East Europe and USSR attempt to maintain livestock sector

5. Strong domestic demand for soyoil will continue

6. A small increase in disappearance will not offset lower carry-in and higher production; carry-out stocks will be higher

   --15% of annual use
   --the market is not tight and won't respond rapidly to new demand

SLIDE 10: SOYBEANS: STOCKS-PRICE RELATIONSHIP

A. 1991/92 prices averaged $5.62 in Ohio

   --112% of the $5.02 national average loan rate
   --about in line with historic price behavior when supplies are around 118% of use

B. With 1992/93 total supplies around 115% of expected use:

   --prices for the season should average 105-115% of loan

C. With the 1991 national average loan = $5.02, this implies a season average price in the $5.25-5.75 range

SLIDE 11: 1992/93 SOYBEAN PRICE PROSPECTS

A. Soymeal prices are projected to be in the $160-180/ton range

   1. Over the past 15 years, soy meal:corn price ratio has averaged about 2:1 (price per pound)

   2. In recent years, the ratio has trended irregularly upward

      --averaged 2.2 over the past 4 years, but biased upward by high meal prices in 1988

   3. Projections are based on corn price expectations in the $2.00-2.40 range and the meal:corn price ratio in the 2.1:1 to 2.2:1 range

B. Soyoil prices through next summer are trading in roughly the 18-20 cent/pound range

   1. Soyoil prices seldom move much above the 20 cent level unless carry-out stocks fall below roughly 1-1.2 bil. pounds

   2. Next year's carry-out is estimated at 2.5 billion pounds

C. Deducting a 50-60 cent/bu. crush margin from the projected product values yields a whole bean value in the $5.25-5.75 range, about the same as that indicated by the stocks:loan ratio, above

SLIDE 12: SOYBEANS: OHIO AVERAGE FARM PRICES

A. 1989/90 prices exhibited a fairly normal return to a reasonably consistent pattern in previous normal crop year that follow short crop years

--storage, except for the drought rise in July and August

B. 1990/91 prices never did recover from an expected harvest low

--exports were dismal
--storage didn't pay

C. 1991/92 prices

--storage returns through March
--flat during April
--sharp rise in May and June
--rapid decline in July and August

D. Actual 1992/93 prices

September = $5.36

October = $5.10

E. Post-harvest prices normally wouldn't bottom out until November or December

--strong farmer holding at harvest, October may be close to this year's low

F. A May-June high of about $5.75 is necessary to fully recover post-harvest holding costs

1. The normal seasonal pattern suggests this is likely, with $6.00 even possible

2. The usual spring/summer weather scare could provide a price lift beyond holding costs

3. But, as this is after next spring's South American harvest, it will be affected by:

   a. size of the 1992 South American crop,

   b. timing of sales of the 1992 South American crop on world markets

   c. size of 1993 U.S. plantings

   d. downward price pressure as crop matures in July and August

SLIDE 13: WHEAT: SUPPLY AND USE

			projected	
	1991/92	% change	1992/93	% change
planted acreage (mil)	69.9	-10	72.3	+3
harvested ac. (mil)	57.7	-17	62.4	+8
yield (bu/ac)	34.3	-13	39.4	+15
production (mil bu)	1,981	-28	2,459	+24
carry-in (mil bu)	866	+62	472	-46
total supply (mil bu)	2,888	-13	2,981	+3
domestic food (mil bu)	785	0	835	+6
total domestic use (mil bu)	1,135	-18	1,183	+4
exports (mil bu)	1,281	+20	1,225	-4
total use (mil bu)	2,416	-1	2,408	0
carry-out (mil bu)	472	-46	573	+21

A. 1991/92 comments:

1. Total supplies, down 13% from the lowest since 1975

2. Production was down 28%, but the lingering effect of the '88 drought kept carry-in low

3. Domestic use was down 18% because of reduced feed use, but exports increased by 20%; total use fell by 1%

4. Carry-out decreased, the third lowest in 18 years

B. 1992/93 comments:

1. Higher production more than offset the lower carry-over

   a. an 8% increase in harvested acreage

   b. higher yield, 39.4 bu./acre, up 15%

   c. a 24% increase in total production

2. Total use will be unchanged

   a. domestic feed use will be up 4%

   b. exports down 4%

      --Soviet exports could trigger price rise

3. Carry-out up 21%

      --will keep a lid on prices

SLIDE 14: WHEAT: STOCKS-PRICE RELATIONSHIP

A. 1991/92 Ohio prices averaged $3.00

      --147% of the national average loan rate of $2.04

B. With year-ending stocks decreasing toward 600 mil. bu., this season average price looks to be roughly 1.5 times the national average $2.21 loan rate; $3.10-3.30

C. Soft red winter wheat prices will probably equal national averages

      --SRW supplies are up by 32%

D. Ohio prices should average in the $3.10-3.30 range for the 1992/93 marketing year

SLIDE 15: WHEAT: OHIO AVERAGE FARM PRICES

A. Prices trended down after '88 drought until November '90

B. Price recovery lasted until February '92, when the evidence of short carry-out began to develop

--1992/93 actual prices:

June = $3.50
July = $3.75
August = $2.90
September = $3.05
October = $3.10

C. Seasonal price high in the $3.30 range expected in early 1991

1. Not likely to cover holding costs from here on

2. Reduced ARP (0%) acreage in 1993 can cause acreage and production to increase 5% in '93

SLIDE 16: 1993 WHEAT PROGRAM

A. Major program changes:

1. ARP decreased from 5% to 0%

2. Flex acres

a. 15% flex to wheat - 5-month deficiency on 85% of base acreage plus 15% at market price

b. 15% flex to alternate crop - 5-month deficiency on 85% of base acreage plus 15% times income from alternative crop

3. Target price held at $4.00

4. Loan rate up from $2.21 to $2.45

B. Break-even price

1. About $4.00

2. All well above expected price for 1993 crop in the low $3 range, assuming normal weather

3. Program gain is substantial, but options are not equal --15% flex in corn and/or beans is best

SLIDE 17: 1993 FLEX ACRES ECONOMICS

A. Projections are based on:

1. Fairly typical crop yields in Ohio

2. Price expectations for 1993 crops that assume normal weather and usual price relationships

3. Variable costs based on Extension's Ohio budgets adjusted somewhat to reflect probably changes in input prices

B. Returns above variable costs (or returns to fixed costs, including land), based solely on market prices (no deficiency payments on flex acres):

1. Show no advantage for corn compared to soybeans

   a. if $6.00 beans, advantage shifts to beans

   b. market will likely equalize

2. Show a significant advantage for either soybeans or corn compared to wheat

C. Comparisons are added for two minor crops: oats and canola

1. Market returns show little incentive for oats

   --target price of $1.45 is not high enough to make the crop competitive with any of the alternatives, with our without government payments

2. Canola compares surprisingly well with soybeans

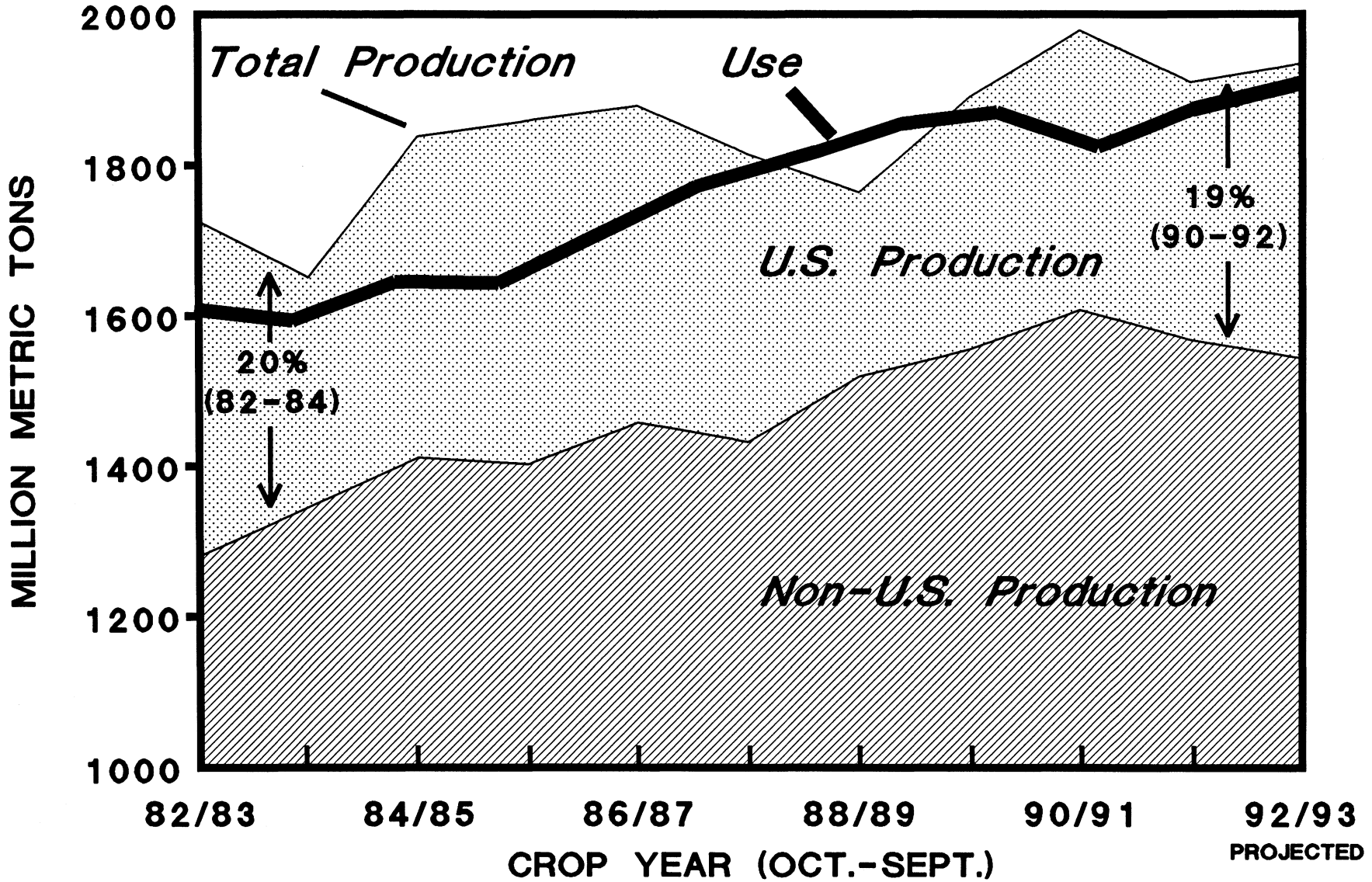
3. But, considerable risk with canola

   a. production techniques are still largely "trial and error"

   b. market is not well developed

   --relatively few experienced handlers
   --crushers are just getting established
   --essentially no secondary market to remove supplies that exceed crusher demand
   --price relationship between canola oil and soyoil is still tentative

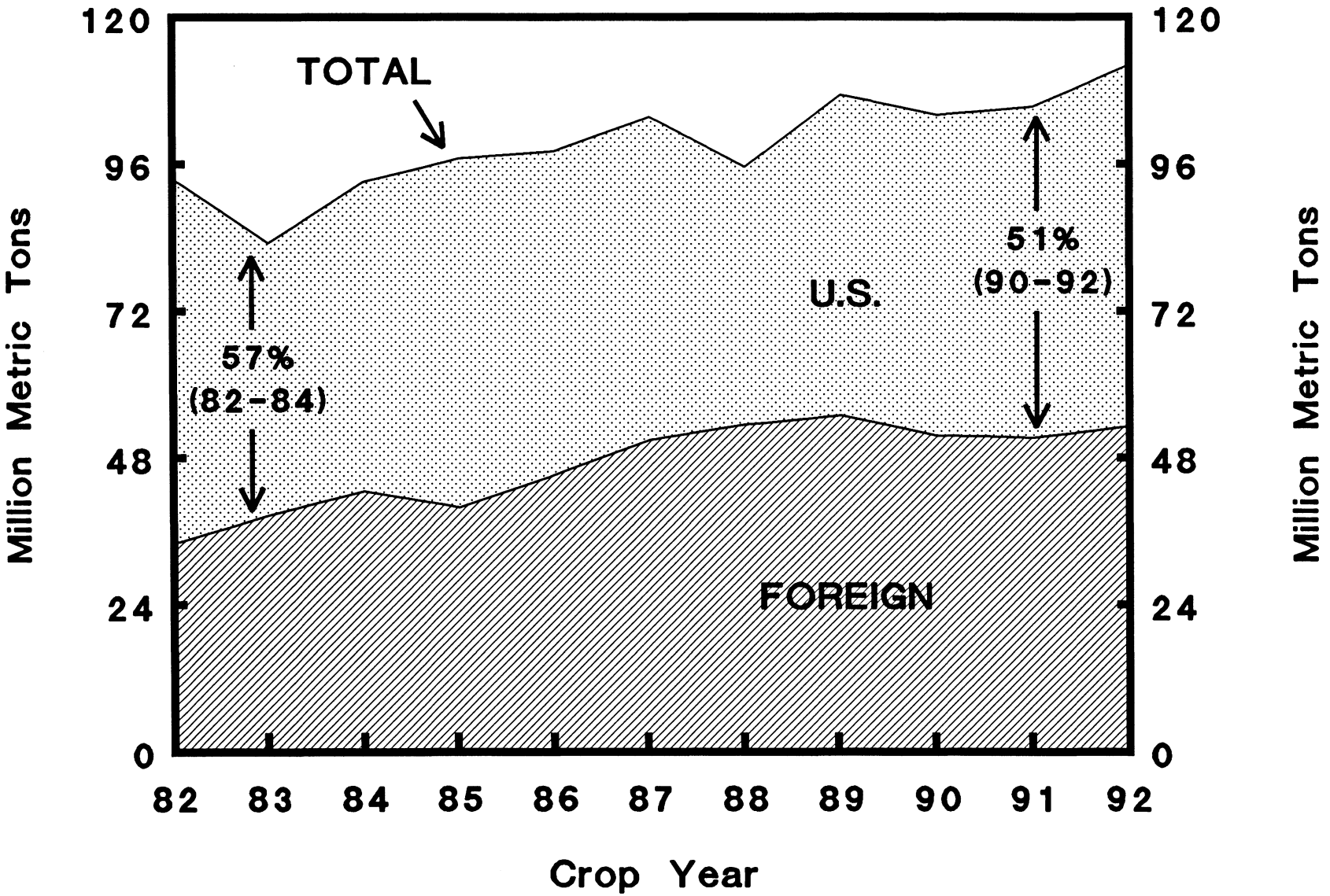
WORLD GRAIN AND OILSEED PRODUCTION AND USE



Slide 1

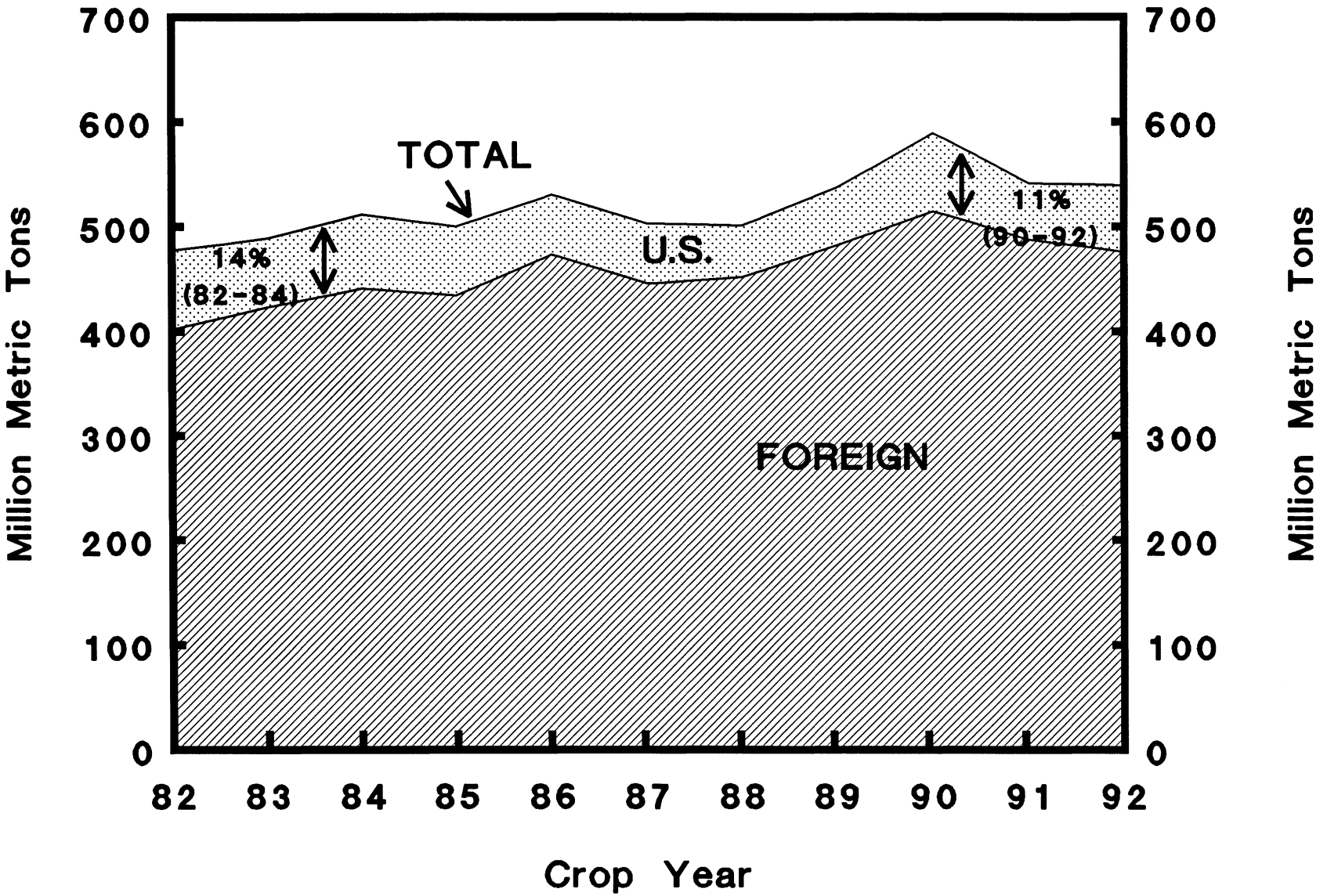
(Revised 11/12/92)

WORLD SOYBEAN PRODUCTION



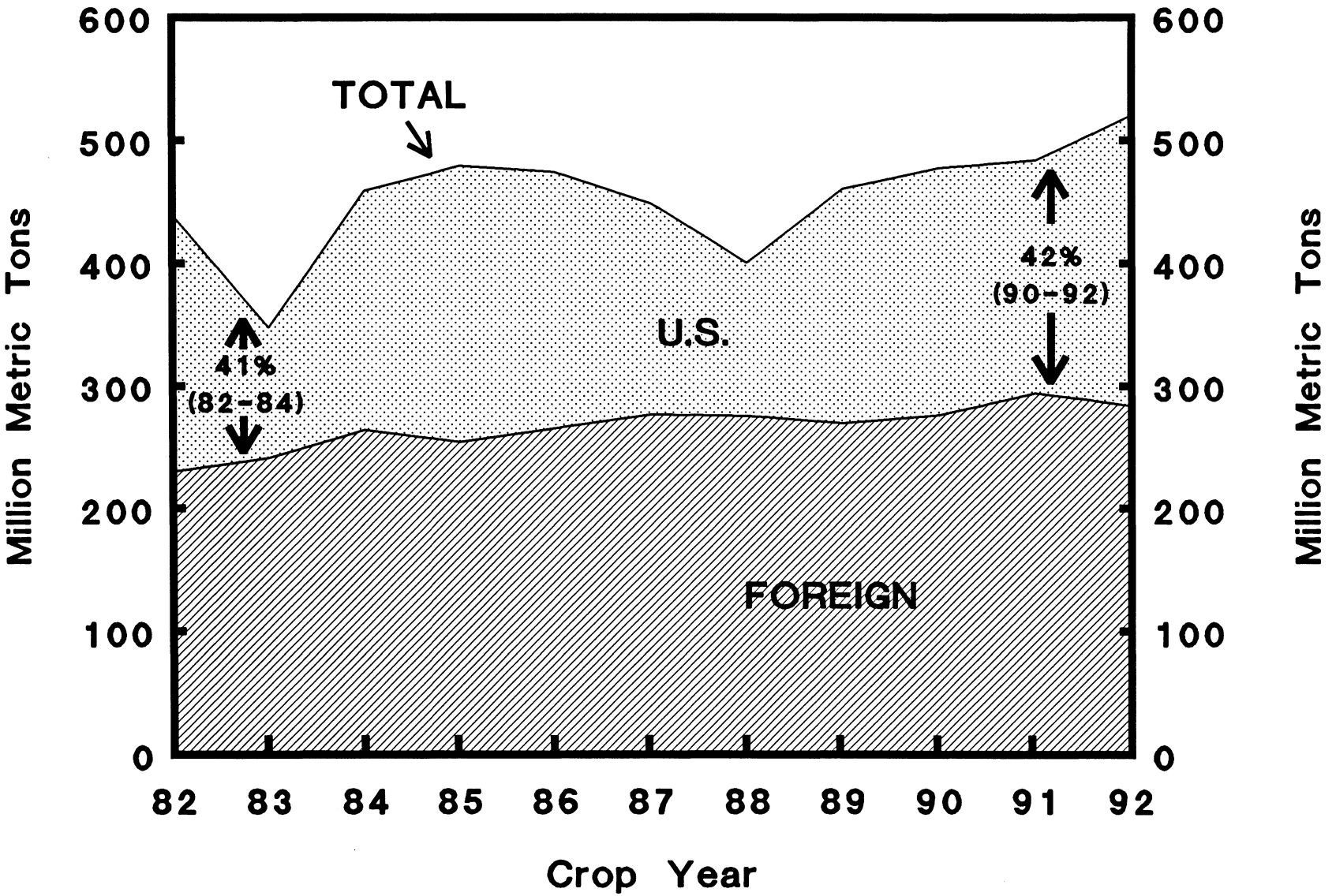
Slide 2

WORLD WHEAT PRODUCTION



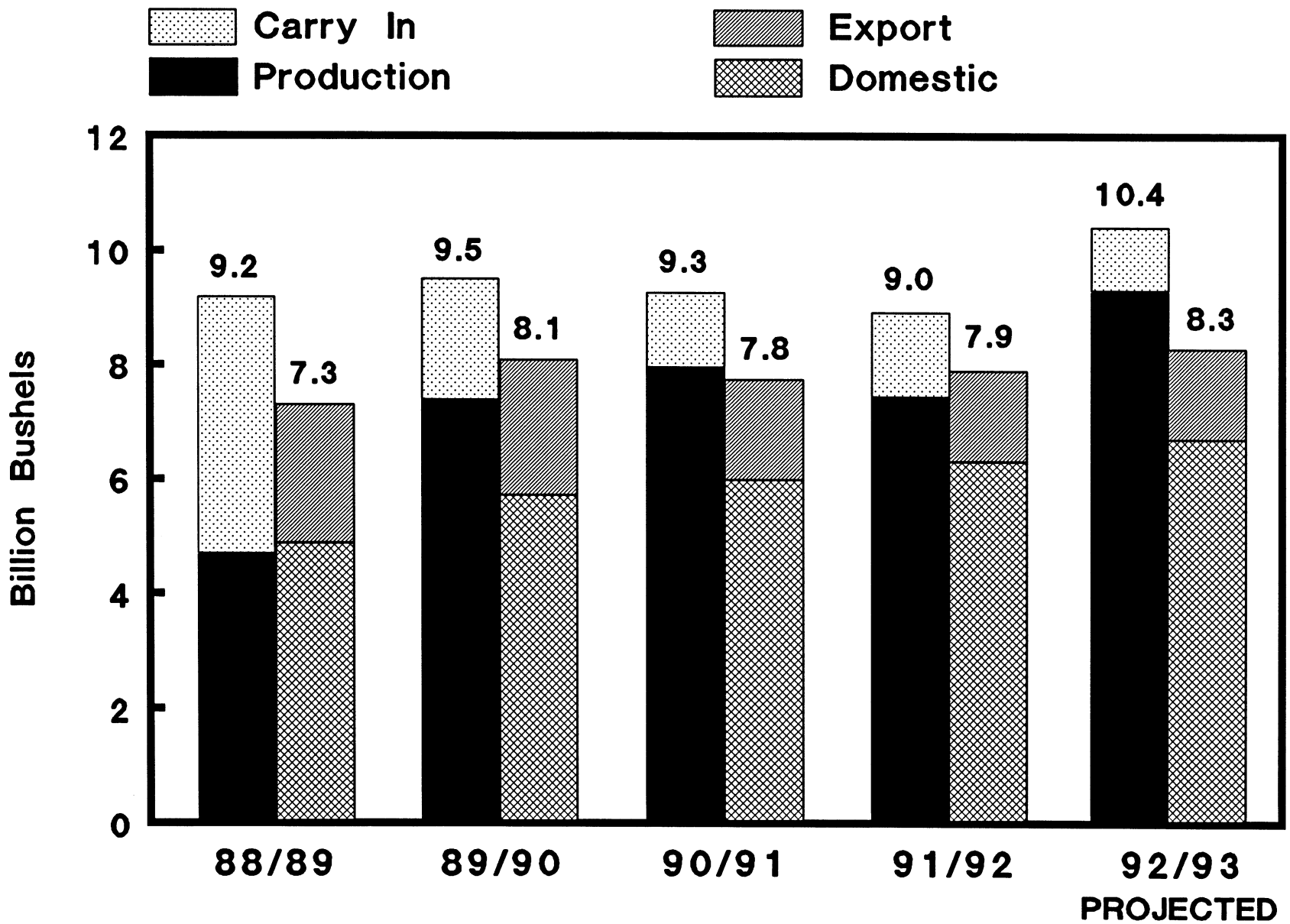
Slide 3

WORLD CORN PRODUCTION



Slide 4

CORN: SUPPLY AND USE



Slide 5
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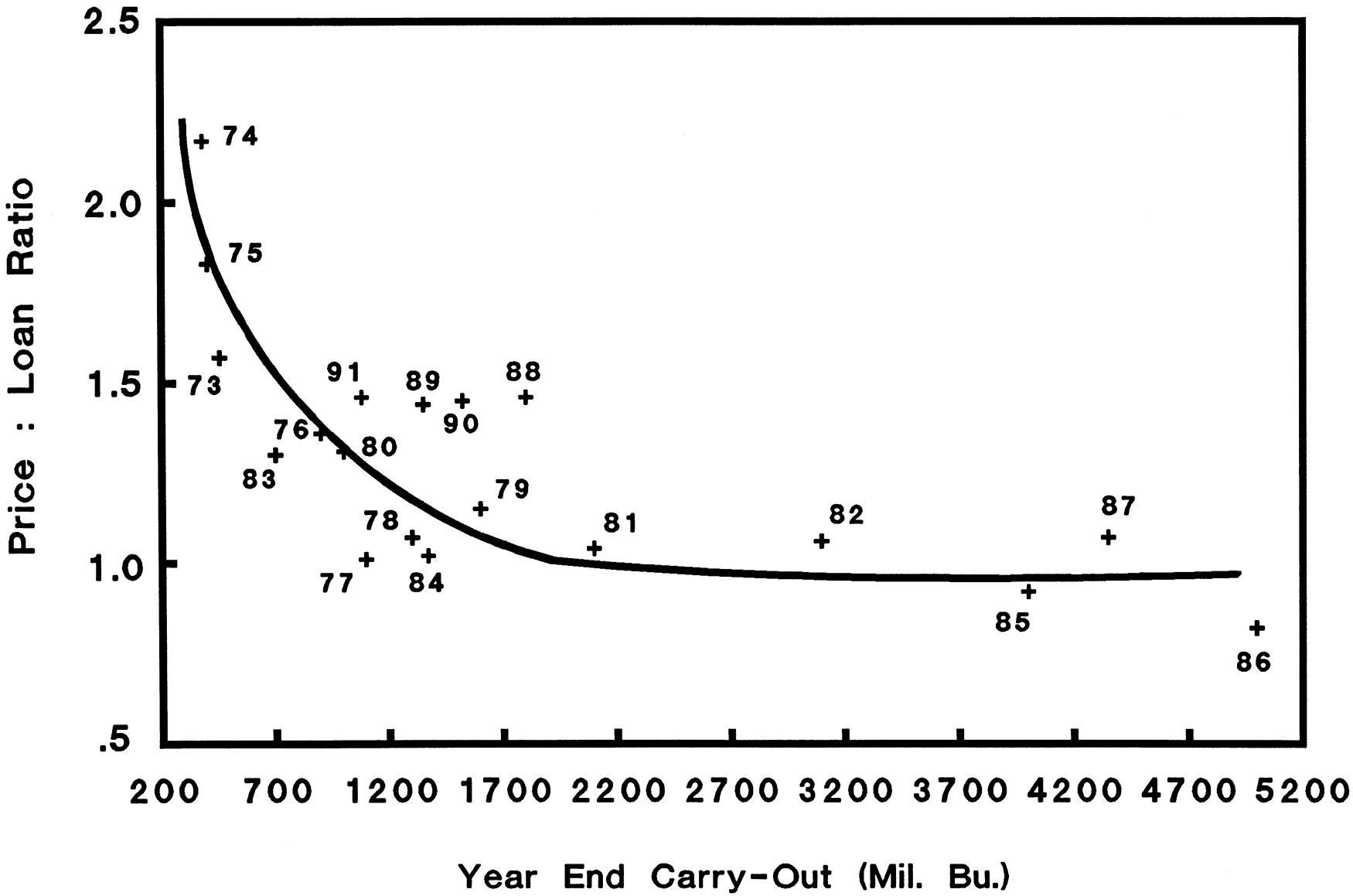
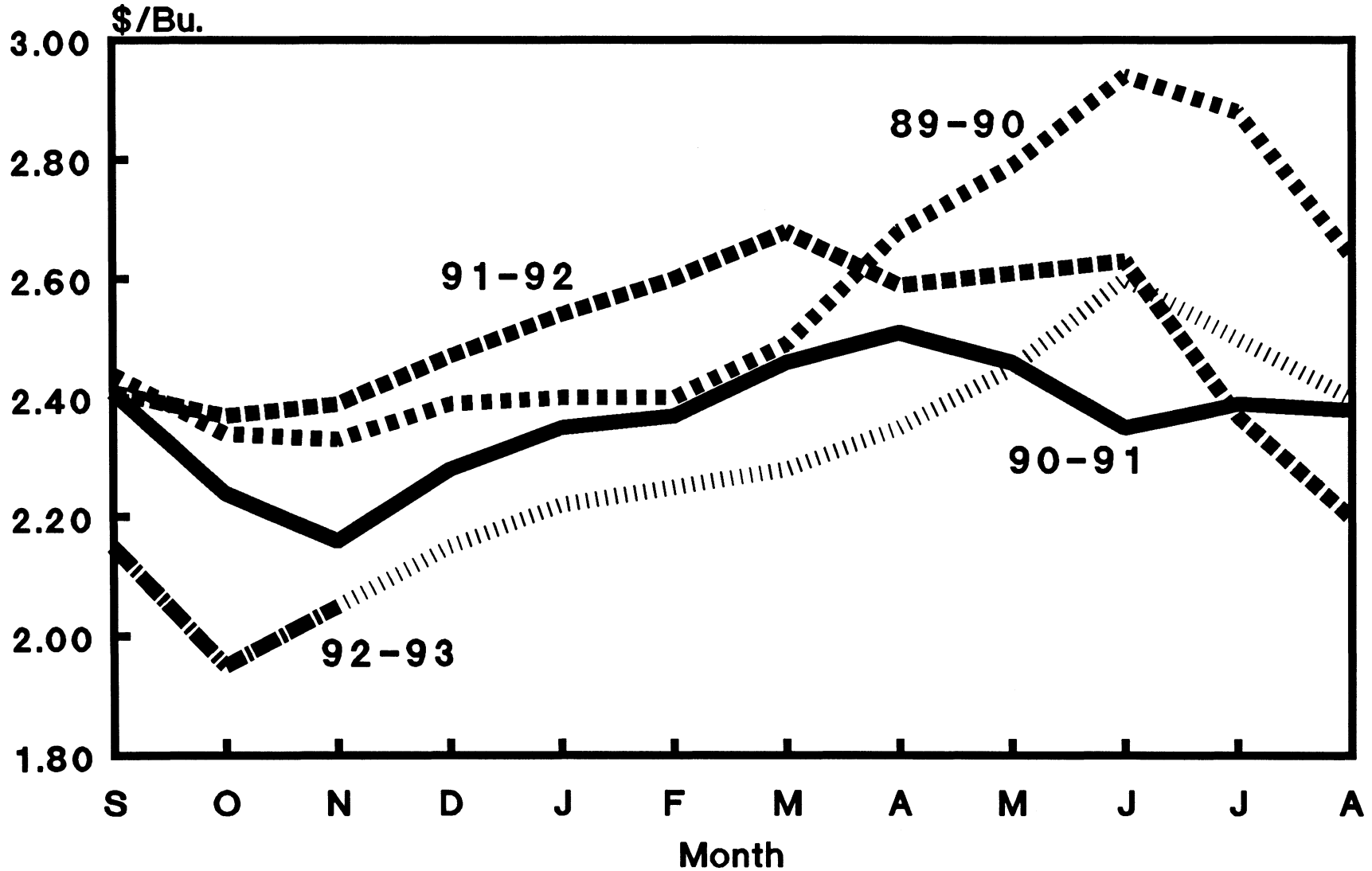
CORN: STOCKS-PRICE RELATIONSHIP

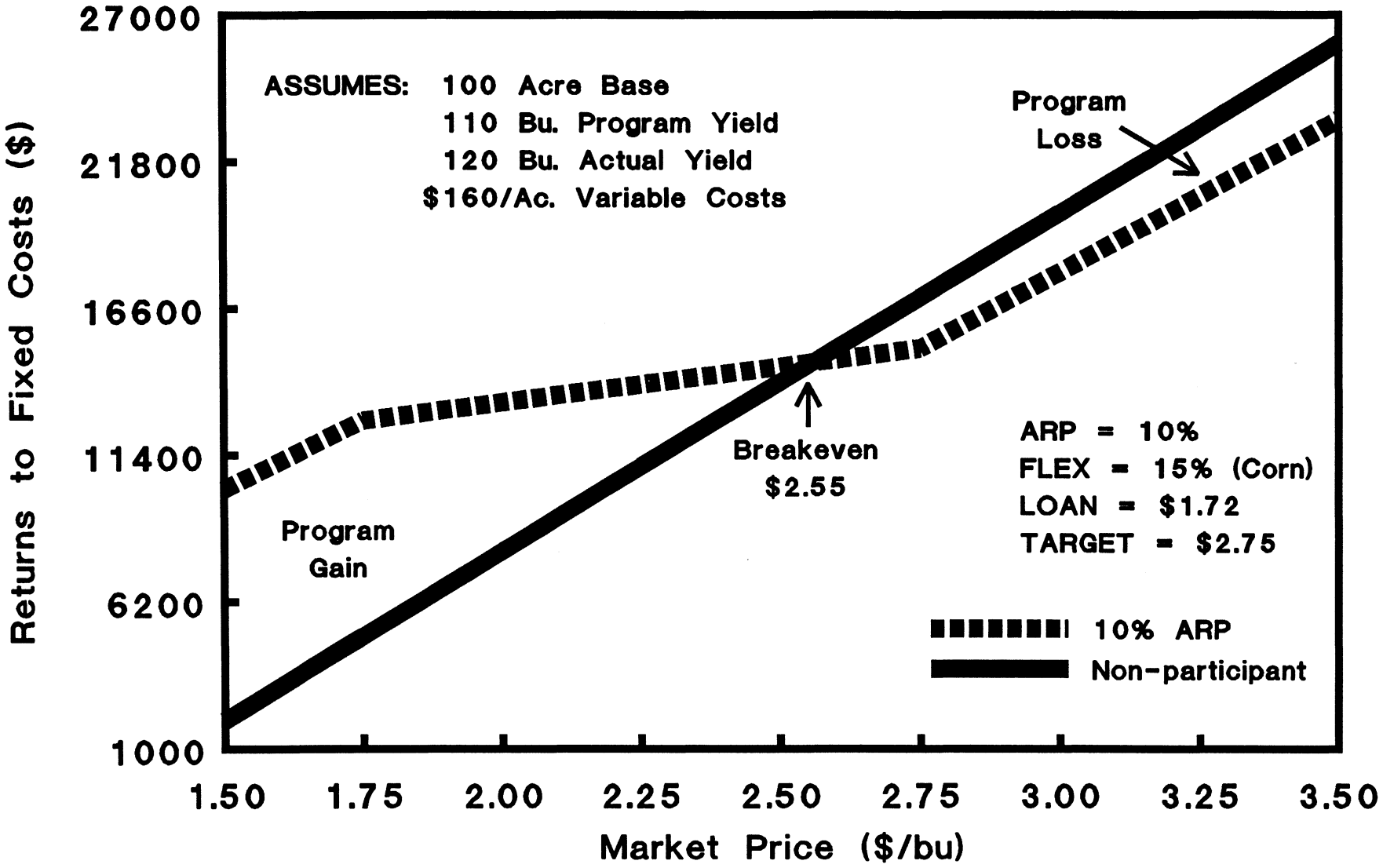


CORN: OHIO AVERAGE FARM PRICES

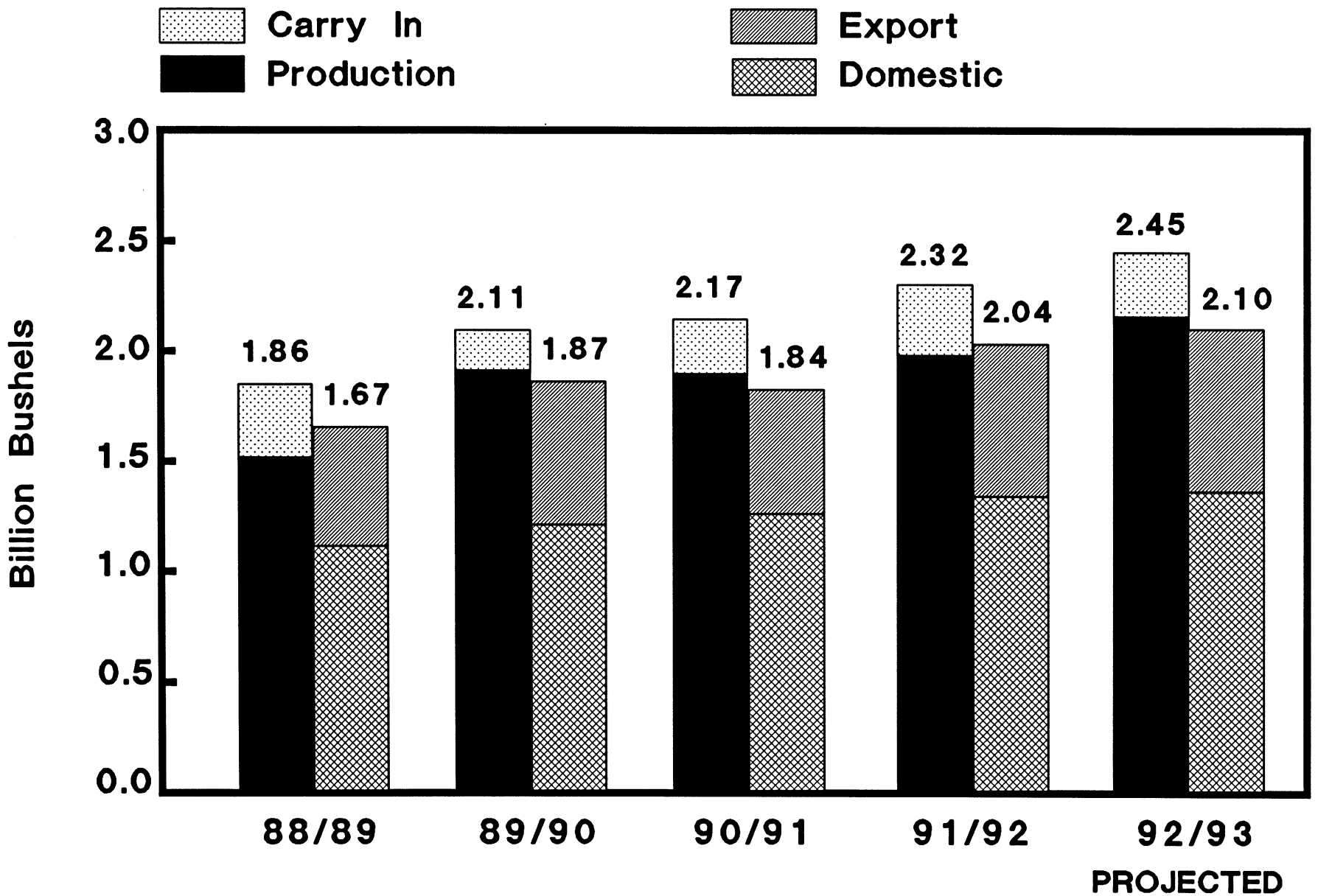


92-93 Nov-Aug Projected

1993 CORN PROGRAM



SOYBEANS: SUPPLY AND USE



Slide 9
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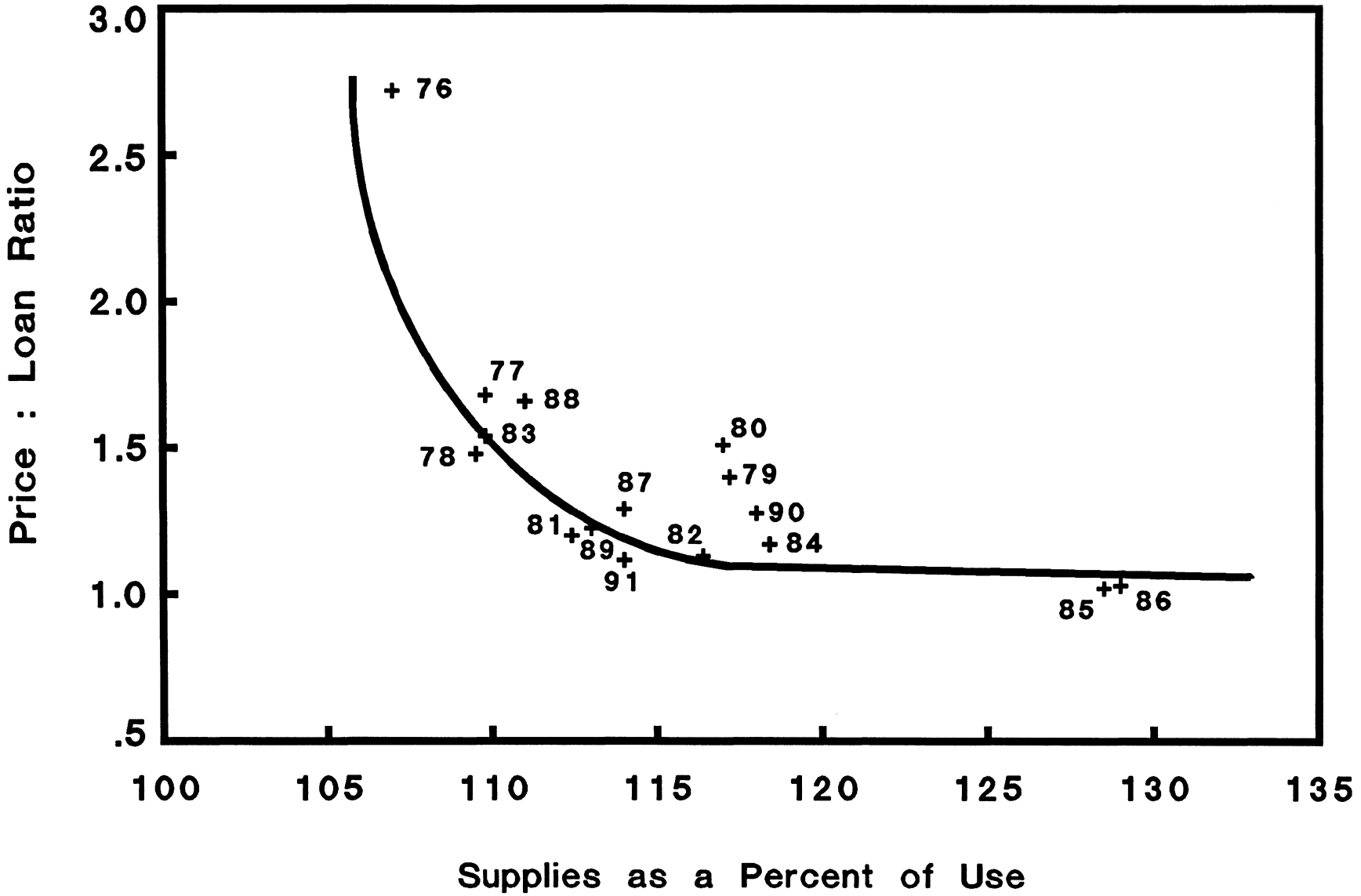
SOYBEANS: STOCKS-PRICE RELATIONSHIP

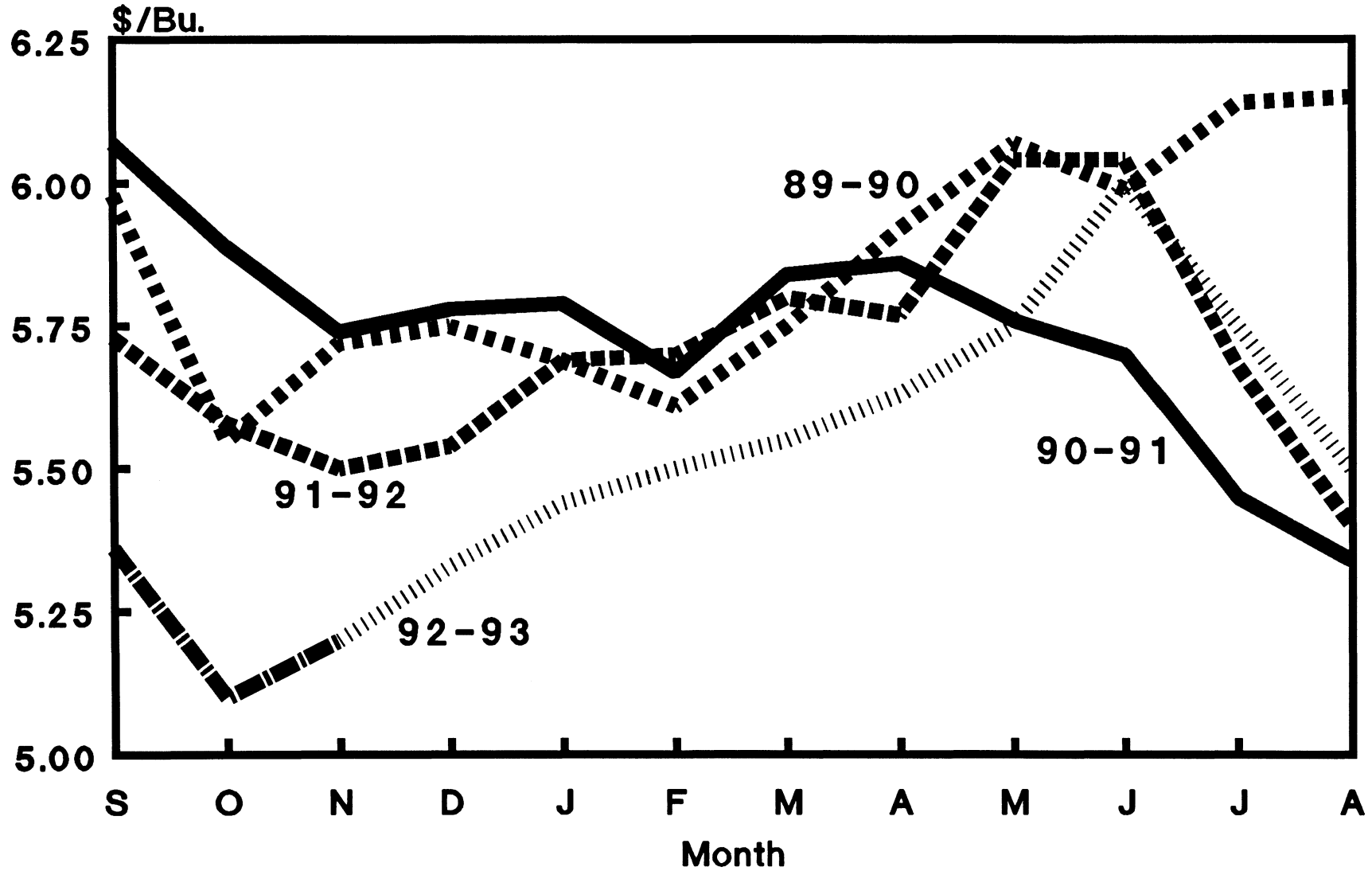


1992-93 SOYBEAN PRICE PROSPECTS (Decatur, IL)

	Per Bu.	Price	Value
Meal (Ton)	47.5#	$160-180	$3.80 to 4.28
Oil (Lb.)	11.0#	$0.18-0.20	$1.98 to 2.20
Total			$5.78 to 6.48

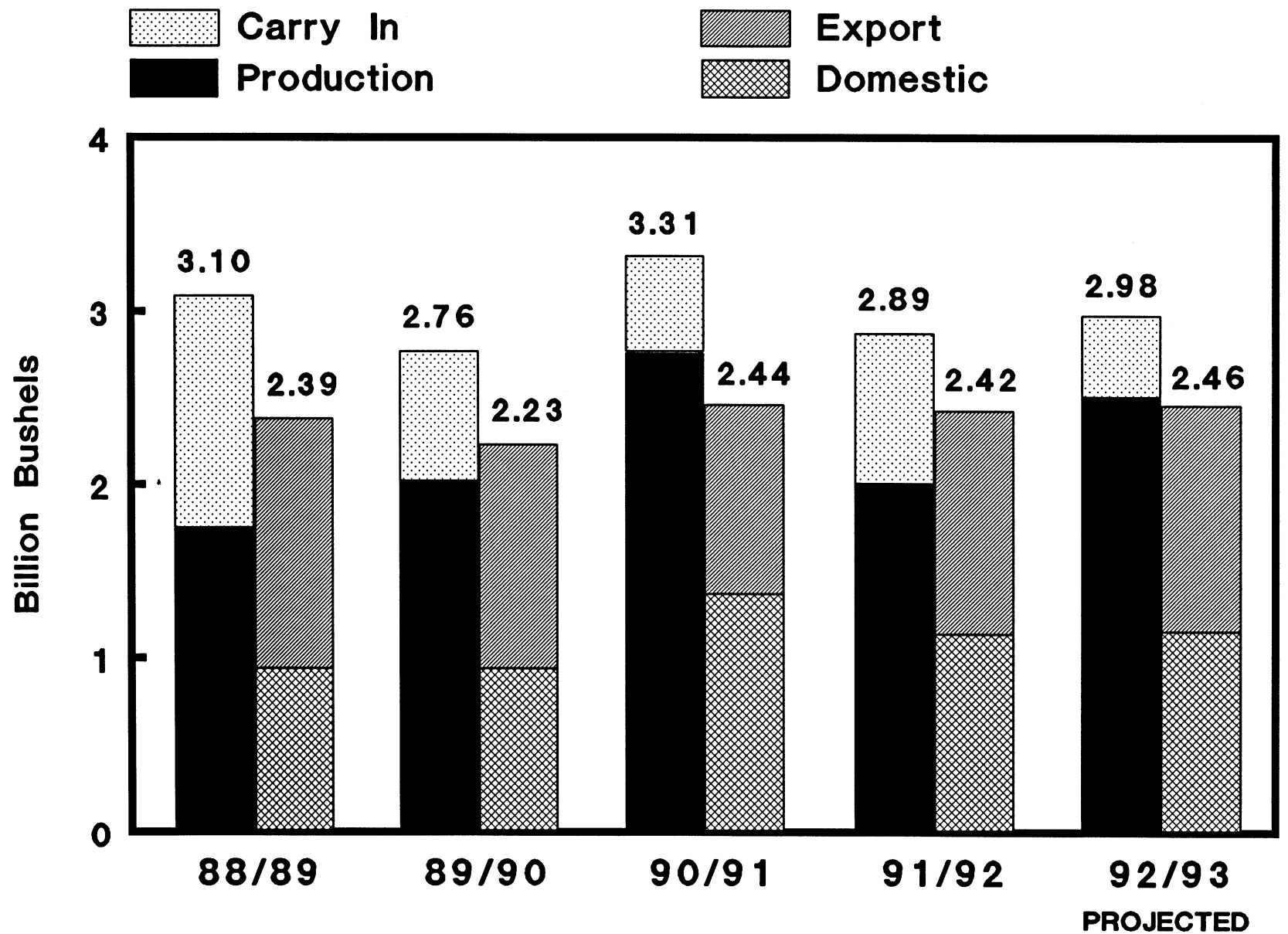
Minus Crushing Margins

SOYBEANS: OHIO AVERAGE FARM PRICES



92-93 Nov-Aug Projected

WHEAT: SUPPLY AND USE



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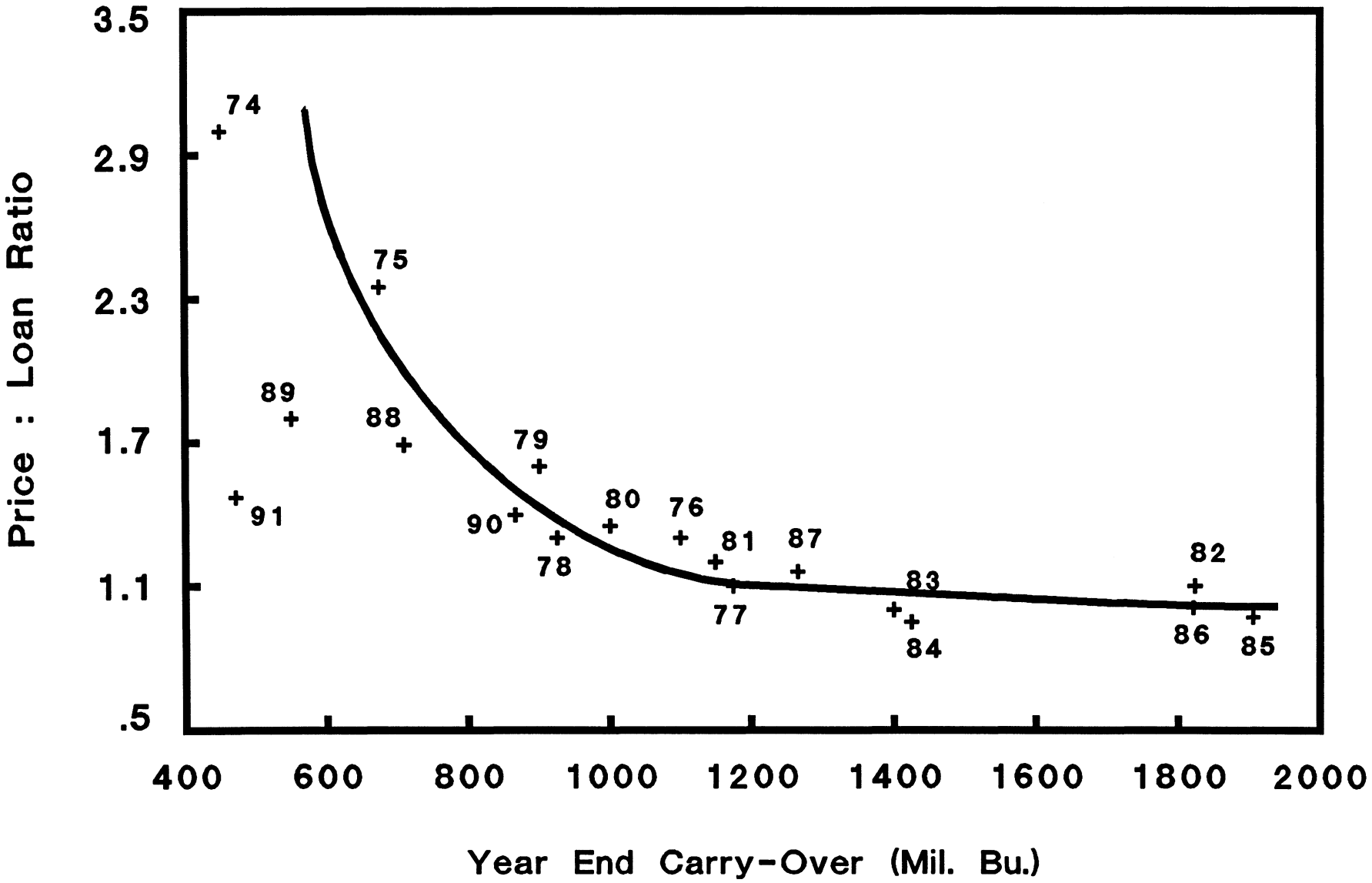
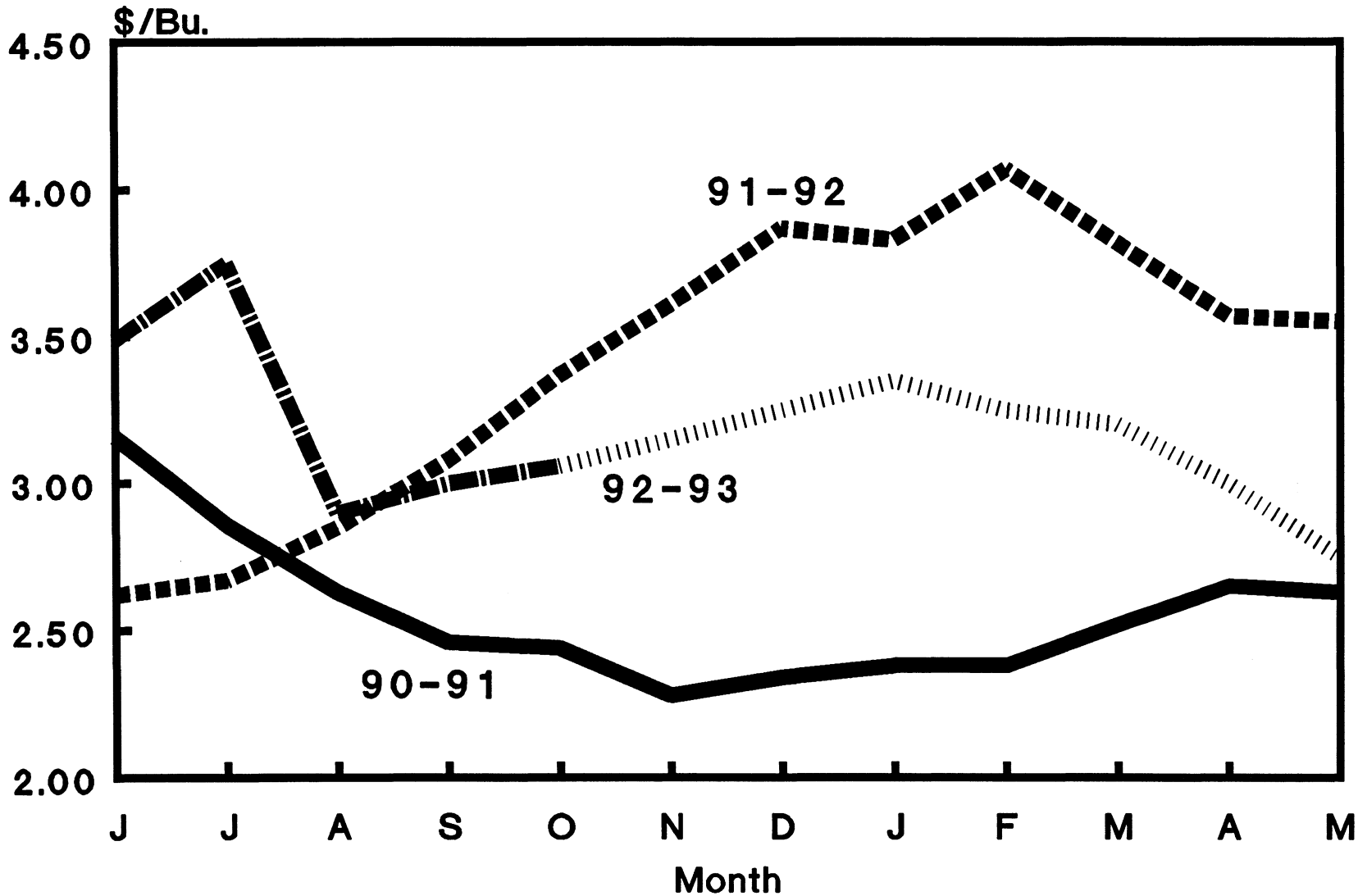
WHEAT: STOCKS-PRICE RELATIONSHIP

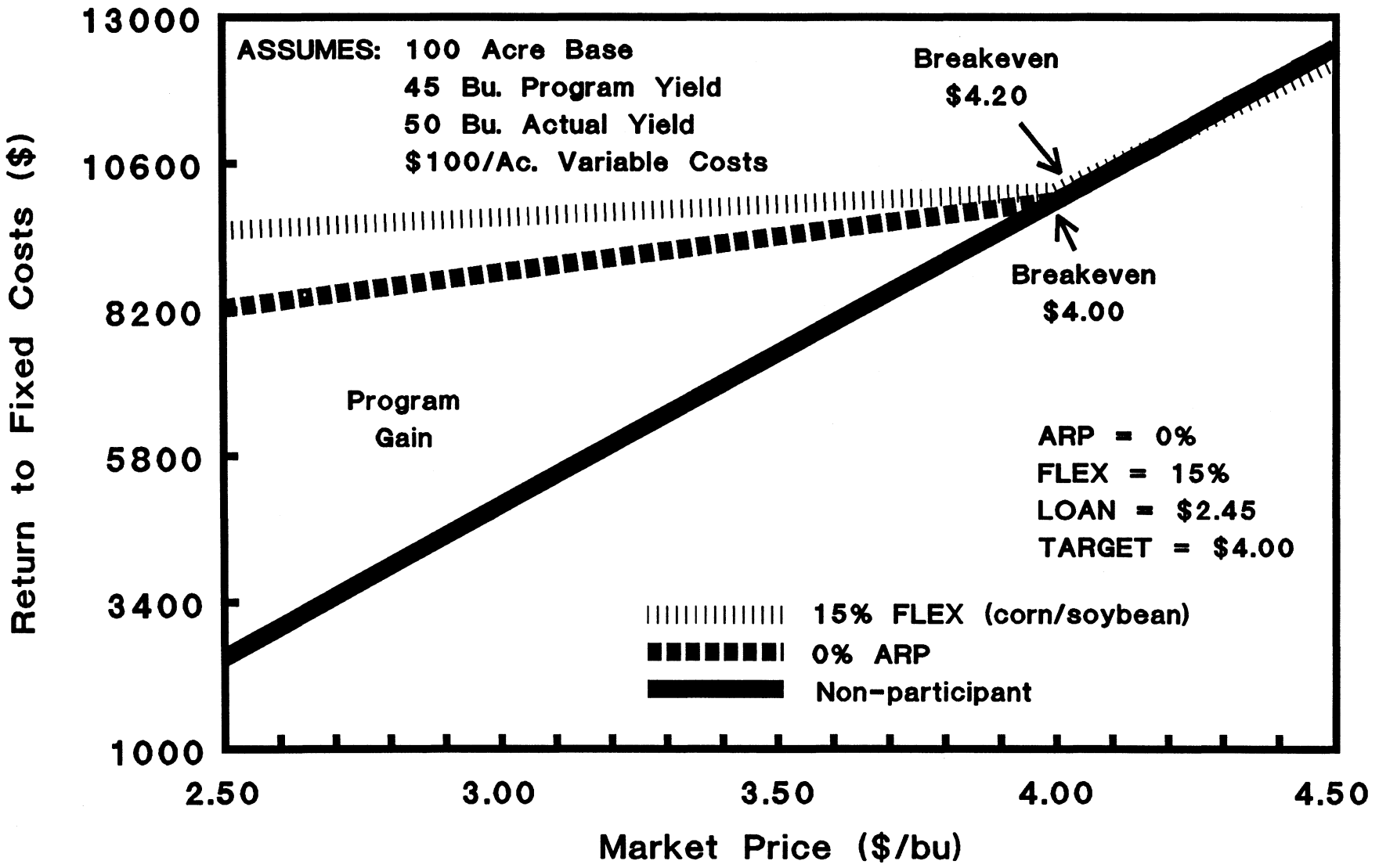


WHEAT: OHIO AVERAGE FARM PRICES



92-93 Oct-May Projected

1993 WHEAT PROGRAM



1993 FLEX ACRES ECONOMICS

per acre	Corn	Soybeans	Wheat	Oats	Canola
Yield (bu.)	120	40	50	75	40
Market Price ($/bu.)	2.25	5.50	3.00	1.40	5.00
Market Returns ($)	270	220	150	105	200
Variable Costs ($)	160	110	100	70	100
Market Returns to Fixed Costs ($)	110	110	50	35	100